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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,207	07/15/2003	Rajeev Grover	200300624-1	1087
22879	7590	07/26/2006	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			CHOU, ANDREW Y	
			ART UNIT	PAPER NUMBER
			2192	

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/621,207	Applicant(s) GROVER ET AL.	
	Examiner Andrew Y. Chou	Art Unit 2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Claims 1-17 have been examined. Claims 1, 10, and 15 are independent claims.

The priority date recognized for this application is 07/15/2003.

Oath/Declaration

2. The Office acknowledges receipt of a properly signed oath/declaration filed on 07/15/2003.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitation "the program stack" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-17 are rejected under 35 U.S.C 102(e) as being anticipated by Bates et al. US 6,493,834 B1 (hereinafter Bates).

Claim 1:

Bates discloses an exception handling mechanism comprising:

an exception handler for recording exception information dependant on types of exceptions and programming tasks that encounter exceptions (see for example FIG. 1, items 128, 129, and related text); and

a recovery agent for taking an action upon an occurrence of an exception (see for example FIG. 3, item 330, and related text);

wherein the action to be taken upon the occurrence of the exception corresponds to a type of exception and a programming task, and includes one or a combination of restarting the programming task, terminating the programming task (see for example FIG. 2, step 260, and related text), resetting a system running the programming task, and disregarding the exception.

Claim 2:

Bates further discloses the mechanism of claim 1 wherein the recorded exception information associated with an exception is associated with a signature for identifying the recorded exception information with its associated exception (see for example FIGs. 5, 6, 7, and related text).

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Claim 3:

Bates further discloses the mechanism of claim 2 wherein the signature includes a version of a program running the programming task (see for example column 8, lines 32-47).

Claim 4:

Bates further discloses the mechanism of claim 1 wherein a plurality of sets of exception information for a plurality of exceptions is maintained in the system running the programming task; each set of exception information being associated with a signature for identifying that set of exception information (see for example FIG. 5, and related text).

Claim 5:

Bates further discloses the mechanism of claim 1 wherein the recorded exception information associated with an exception is associated with a signature for identifying the format of the exception information (see for example FIG. 7, and related text).

Claim 6:

Bates further discloses the mechanism of claim 1 wherein the recorded exception information includes data related to the program stack, including data to reconstruct the stack at time of exception (see for example column 4, lines 33-45).

Claim 7:

Bates further discloses the mechanism of claim 1 further comprising an analysis tool communicating via an interface with the system running the programming task, for identifying causes of the exception (see for example FIG. 3, item 310, and related text)

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Claim 8:

Bates further discloses the mechanism of claim 7 wherein the analysis tool uses a version to match the object code of a program running the programming task to the source code of the program (see for example column 7, lines 13-37)

Claim 9:

Bates further discloses the mechanism of claim 1 wherein the exception handler and the recovery agent run on a first system (see for example FIG. 1, item 120, and related text) embedded in a second system (see for example FIG. 1, item 100, and related text)

Claim 10:

Bates discloses a processing system comprising:

- a first system (see for example FIG. 1, item 100, and related text);
 - a second system embedded in the first system (see for example Fig. 1, item 120, and related text);
 - an exception handler running in the second system for recording exception information upon an occurrence of an exception in the second system (see for example FIG. 1, items 128, 129, and related text; and
 - a recovery agent running on the second system, for taking an action upon the occurrence of the exception based on the recorded exception information (see for example FIG. 3, item 330, and related text);
- wherein the action corresponds to a type of exception and a programming task (see for example FIG. 2, step 260, and related text).

Claim 11:

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Bates further discloses the processing system of claim 10 further comprising an analysis tool for receiving, via an interface, the recorded exception information from the second system and for identifying the cause of the exception (see for example FIG. 3, items 127, 310, and related text).

Claim 12:

Bates further discloses the processing system of claim 10 wherein the second system includes non-volatile memory for storing exception information (see for example FIG. 1, item 120, and related text).

Claim 13:

Bates further discloses the processing system of claim 12 wherein the exception information stored in the non-volatile memory is compressed (see for example FIG. 1, item 120, and related text).

Claim 14:

Bates further discloses the processing system of claim 12 wherein the exception information stored in non-volatile memory includes a plurality of sets of exception information, each set being associated with an exception and a signature (see for example FIG. 5, and related text).

Claim 15:

Bates discloses a computing system comprising:

an exception handler for recording exception information on non-volatile memory upon an occurrence of an exception (see for example FIG. 1, items 128, 129, and related text);

a recovery agent for taking an action upon the occurrence of the exception based on the recorded exception information; and an analysis tool for identifying the cause of the exception (see for example FIG. 3, item 330, and related text);

wherein the analysis tool receives the exception information from the non-volatile memory via an interface interfacing a first system (see for example FIG. 1, item 120, and related text) and a second system (see for example FIG. 1, item 100, and related text) running the exception handler and the recovery agent (see for example FIG. 3, item 310, and related text).

Claim 16:

Bates further discloses the computing system of claim 15 wherein the second system (see for example FIG. 1, item 100, and related text) is embedded in a third system (see for example FIG. 1, and related text).

Claim 17:

Bates further discloses the computing system of claim 15 wherein the recorded exception information includes data related to a program stack (see for example FIG. 5, and related text)

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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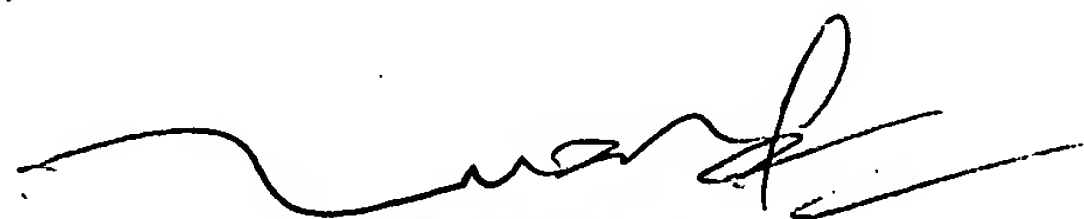
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Y. Chou whose telephone number is (571) 272-6829. The examiner can normally be reached on Monday-Friday, 8:00 am – 4:30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached on (571) 272-3695.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is (571) 272.2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

AYC



TUAN DAM
SUPERVISORY PATENT EXAMINER